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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,926

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Atsushi Inoue

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06/15/2005

FOLEY AND LARDNER

SUITE 500

3000 K STREET NW

WASHINGTON, DC 20007

EXAMINER

DESIR, PIERRE LOUIS

ART UNIT

PAPER NUMBER

2681

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/645,926	<b>Applicant(s)</b> INOUE ET AL.	
	<b>Examiner</b> Pierre-Louis Desir	<b>Art Unit</b> 2681	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14-23,25 and 26 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 14-23 and 26 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>October 09, 2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 14 is objected to because of the following informalities: "front" (line 10 of the claim) should be "from" . Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 14-15, 19-23, 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Doviak et al. (Doviak), U.S. Patent No. 6418324.

Regarding claim 14, Doviak discloses a radio portable terminal device (i.e., mobile device) (see fig. 1), comprising: a radio communication unit for carrying out communications (see col. 9, lines 4-7) with a correspondent device (i.e., locally-attached devices) (see fig. 1, item 12) connected to a computer network or a telephone network (i.e., communication network 10) (see fig. 1), through a radio base station by exchanging data packets (see col. 9, lines 4-16); and a packet transfer processing unit for determining whether a prescribed condition regarding communication cost is satisfied for the communications with the correspondent device or not (i.e., a router may be provided

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which selects a communications network in accordance with user configured parameters (see abstract), which include cost parameter wherein the least costly slot and highest priority will be default slot) (see col. 35, lines 19-21), and transferring data packets containing data to be transmitted to the correspondent device to a prescribed another computer connected to the computer network such that the data to be transmitted to the correspondent device are transmitted to the correspondent device from the prescribed another computer when it is determined that the prescribed condition is satisfied for the communications with the correspondence device (i.e., the mobile data controller accepts data from the remote device. The mobile data controller formats and sends the data to the remote network controller 20, which may run on a personal computer (i.e., transmission of data to a prescribed another computer). The host data controller forwards the data to the mobile interface. The mobile interface accepts the data from the host data controller. The mobile interface forwards the data to the inter-process communication manager, which places the data into a queue for the destination service interface, wherein the service interface forwards the data to wired communication network) (see col. 9, lines 61-62, col. 12, lines 4-20, lines 47 through col. 13, lines 10).

Regarding claim 15, Doviak discloses a device (see claim 14 rejection) wherein the packet transfer processing unit transfers the data packets to the prescribed another computer by attaching an information for requesting the prescribed another computer to transmit the data contained in the data packets to the correspondent device, when the data to be transmitted to the correspondent device have a specific type of attribute (i.e., the remote network controller takes the data transported by the radio infrastructure, irrespective of the format protocol of the radio infrastructure, and converts the data into a

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format protocol recognized by the wired network. Thus, one skilled in the art would unhesitatingly conceptualize the inherency of attaching information to instruct the remote network controller to convert the data into a form recognized by the wired network) (see col. 9, lines 25-29).

Regarding claim 19, Doviak discloses a device (see claim 14 rejection) further comprising a memory (i.e., a flash memory where the database is stored) (see col. 37, lines 7-8) for registering in advance priority levels assigned to a plurality of computers (see col. 37, lines 11-23), and the packet transfer processing unit selects one of said plurality of computers as the prescribed another computer according to the priority levels registered in the memory (see col. 37, lines 32-40).

Regarding claim 20, Doviak discloses a device (see claim 14 rejection) wherein the radio communication unit has at least one of a function for connecting the radio portable terminal device to the telephone network via the radio base station and a function for connecting the radio portable terminal device to the computer network via the radio base station and a router device (i.e., the remote devices are logically connected to the wired network through the radio infrastructure) (see col. 9, lines 11-14).

Regarding claim 21, Doviak discloses a gateway device (see fig. 26, and col. 26, lines 43-44), comprising: a transfer unit for transferring voice data received from a network for transferring data packets, to a radio portable terminal device that is a destination of the voice data (i.e., a transparent communications module) (see fig. 26, and col. 26, lines 54-60), via a telephone network through a radio base station (see col. 26, lines 66 through col. 27, line 2); and a control unit (i.e., the configuration and health module) (see col. 27, lines 23) for judging whether a specified condition which is

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specified to the gateway device from the radio portable terminal device is satisfied by non-voice data that are to be transferred along with the voice data to the radio portable terminal device, if the non-voice data exist (see col. 27, lines 23-34), and controlling the transfer unit to transfer the non-voice data to another computer without transferring the non-voice data to the radio portable terminal device when it is judged that the specified condition is satisfied by the non-voice data (see col. 27, lines 23-34).

Regarding claim 22, Doviak discloses a device (see claim 21 rejection) wherein said another computer/device is a computer connected to the network (see col. 27, lines 24-25) by a local network which is locally defined for communications between the radio portable terminal device and the portable computer/device (see col. 27, lines 24-25), and the another computer/device is specified to the gateway device from the radio portable terminal device (see col. 12, lines 48-64).

Regarding claim 23, Doviak discloses a device (see claim 21 rejection) wherein the specified condition is a condition based on at least one of a size, a format, and a content of data (i.e., the remote network controller takes data transported by the radio infrastructure and converts the data into a format protocol recognized by the wired network) (see col. 9, lines 26-29), which is specified to the gateway device from the radio portable terminal device (i.e., The configuration and health module may accept configuration information from the remote network controller via the radio infrastructure and adjust the operating parameters of the remote gateway accordingly) (see col. 27, lines 23-26).

Regarding claim 25, Doviak discloses a communication processing control method at a radio portable terminal device (see fig. 1), comprising the steps of:

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connecting the radio portable terminal device (see col. 9, lines 4-7) with a correspondent device (i.e., locally-attached devices) (see fig. 1, item 12) connected to a computer network or a telephone network (i.e., communication network 10) (see fig. 1) through a radio base station, and receiving data packets from the correspondent device (see col. 9, lines 4-16); determining at the radio portable terminal device whether a prescribed condition regarding communication cost is satisfied for communications with the correspondent device or not (i.e., a router may be provided which selects a communications network in accordance with user configured parameters (see abstract), which include cost parameter wherein the least costly slot and highest priority will be default slot) (see col. 35, lines 19-21); and transferring data packets containing data to be transmitted to the correspondent device from the radio portable terminal device to a prescribed another computer connected to the computer network such that the data to be transmitted to the correspondent device are transmitted to the correspondent device from the prescribed another computer when the determining step determines that the prescribed condition is satisfied for the communications with the correspondence device (i.e., the mobile data controller accepts data from the remote device. The mobile data controller formats and sends the data to the remote network controller 20, which may run on a personal computer (i.e., transmission of data to a prescribed another computer). The host data controller forwards the data to the mobile interface. The mobile interface accepts the data from the host data controller. The mobile interface forwards the data to the inter-process communication manager, which places the data into a queue for the destination service interface, wherein the service interface forwards the data to wired

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communication network) (see col. 9, lines 61-62, col. 12, lines 4-20, lines 47 through col. 13, lines 10).

Regarding claim 26, Doviak discloses a communication processing control method at a gateway device (see fig. 26, and col. 26, lines 43-44), comprising the steps of: transferring voice data received at the gateway device from a network for transferring data packets, to a radio portable terminal device that is a destination of the voice data (i.e., a transparent communications module) (see fig. 26, and col. 26, lines 54-60), via a telephone network through a radio base station (see col. 26, lines 66 through col. 27, line 2); judging at the gateway device whether a specified condition which is specified to the gateway device from the radio portable terminal device is satisfied by non-voice data that are to be transferred along with the voice data to the radio portable terminal device, if the non-voice data exist (see col. 27, lines 23-34); and controlling the gateway device to transfer the non-voice data to another computer/device without transferring the non-voice data to the radio portable terminal device when the judging step judges that the specified condition is satisfied by the non-voice data (see col. 27, lines 23-34).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doviak et al. (Doviak), U.S. Patent No. 6418324, in view of Raith et al. (Raith), U.S. Patent No. 5729531.

Doviak discloses a device as described above (see claim 14 rejection).

Although, Doviak discloses a device as described above, Doviak does not specifically disclose a device wherein the packet transfer processing unit determines to request the prescribed another computer to carry out the communications with the correspondent device on behalf of the radio portable terminal device when it is judged that a cost required for carrying out the communications between the correspondent device and the radio portable terminal device and a cost required for carrying out the communications between the correspondent device and the prescribed another computer are in a prescribed relationship.

However, Raith discloses a connectionless packet-switched network distributes the routing functions to multiple routing sites, and wherein routing decisions are based on a number characteristics, which include least-cost route or cost metric (see col. 6, line 57 through col. 7, line 1).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to use cost as an indication of the efficiency of the paths that data packet are routed, wherein as cost decreases efficiency generally increases.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doviak et al. (Doviak), U.S. Patent No. 6418324, in view of Anttila, U.S. Patent No. 6370394.

Regarding claim 17, Doviak discloses a device a radio portable terminal device (see claim 14 rejection), wherein the prescribed another computer (i.e., network controller 20) is also connected to the telephone network (see fig. 1) (see claim 14 rejection). Doviak further discloses that the radio portable terminal carries out voice communications with the correspondent device via the prescribed another computer (i.e., the processing of inbound data from the remote device to the wired communication network (col. 12, lines 4-6), wherein the data comprises digital voice (col. 41, lines 39-40), the radio portable terminal device sets up a first voice channel between the radio portable terminal device and the prescribed another computer through the computer network (i.e., the mobile data controller accepts data from the remote device, and formats and sends the data to the remote controller 20) (see col. 12, lines 6-10), and commands the prescribed another computer to set up a second voice channel between the prescribed another computer and the correspondent device (i.e., included in the information which is passed to the service interface is the destination address) (see col. 12, lines 61-64), transfer voice information received from the first voice channel to the second voice channel (i.e., forwards the data to the wired communication network) (see col. 13, lines 9-10), and transfer voice information received from the second voice channel to the first voice channel (i.e., forwards the data to the remote device) (see col. 12, lines 1-2) and the radio portable terminal device transfers received voice information to a final transfer destination of the received voice information according to a data attribute tag attached to

the received voice information and indicating a type of data contained in the received voice information (i.e., inbound asynchronous data from the remote device is collected and transported to the wired communication network) (see col. 10, lines 42-45).

Although, Doviak discloses a device as described, Doviak does not specifically disclose that the radio portable terminal device further comprises a local network communication unit for carrying out communications with another portable computer/device connected to a local network different from the computer network or the telephone network, the local network being a network locally defined for communications between the radio portable terminal device and said another portable computer/device.

However, Anttila discloses a radio portable terminal device further comprises a local network communication unit for carrying out communication with another portable device connected to a local network different from the computer network, the local network being a network locally defined for communication between the radio portable terminal device and the other portable device (see fig. 2, col. 6, lines 20-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to reduce negative issues cause by overlapping networks.

Regarding claim 18, Doviak discloses a device a radio portable terminal device (see claim 14 rejection), wherein the prescribed another computer (i.e., network controller 20) is also connected to the telephone network (see fig. 1) (see claim 14 rejection). Doviak further discloses that the radio portable terminal carries out voice

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communications with the correspondent device via the prescribed another computer (i.e., the processing of inbound data from the remote device to the wired communication network (col. 12, lines 4-6), wherein the data comprises digital voice) (col. 41, lines 39-40), and a call termination from the correspondent device to the prescribed another computer occurs (i.e., process termination request) (see col. 14, lines 42-45), the radio portable terminal device commands the prescribed another computer to respond to the call termination (i.e., the process termination module is invoked) (see col. 15, lines 60-63), enable information input/output at a first voice channel between the prescribed another computer and the correspondent device through the telephone network (i.e., all active sessions are issued a disconnect request) (see col. 16, lines 1-4), set up a second voice channel between the prescribed another computer and the radio portable terminal device through the computer network (i.e., all active sessions are issued a disconnect request; thus. One skilled in the art would immediately envision that a first voice channel and a second voice channel have been set up) (see col. 16, lines 1-4), produce a call termination message containing a data attribute tag indicating voice information (i.e., disconnect request) (see col. 16, line 4), transfer the call termination message to the radio portable terminal device through the second voice channel (i.e., all active sessions are issued a disconnect message) (see col. 16, line 4), transfer voice information received from the second voice channel to the first voice channel (see col. 16, line 4), and upon receiving the call termination message, the radio portable terminal device responds to the call termination message (i.e., all active session have been terminated) (see col. 16, line 6).

Although Doviak discloses a device as described, Doviak does not specifically disclose that the radio portable terminal device further comprises a local network communication unit for carrying out communications with another portable computer/device connected to a local network different from the computer network or the telephone network, the local network being a network locally defined for communications between the radio portable terminal device and said another portable computer/device, nor does he disclose setting up a third voice channel between the radio portable terminal device and said another portable device, transfers voice information received from the second voice channel to the third voice channel while transferring voice information received from the third voice channel to the second voice channel if the third voice channel is set up.

However, Anttila discloses a radio portable terminal device further comprises a local network communication unit for carrying out communication with another portable device connected to a local network different from the computer network, the local network being a network locally defined for communication between the radio portable terminal device and the other portable device (see fig. 2, col. 6, lines 20-27). Thus, one skilled in the art would unhesitatingly conceptualize that the communication between the radio portable terminal device and the other portable device constitutes the setting up of a third voice channel, to and from which voice information would be transferred.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine both arts to arrive at the claimed invention. A motivation for doing so would have been to reduce negative issues caused by overlapping networks.


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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Pierre-Louis Desir  
AU 2681  
06/09/2005

**JEAN GELIN**  
**PRIMARY EXAMINER**  
